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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,436	10/29/2003	Koichiro Hara	501558.20006	6791

26418 7590 07/28/2006

REED SMITH, LLP  
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EXAMINER

NGUYEN, THINH H

ART UNIT PAPER NUMBER

2861

DATE MAILED: 07/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/696,436	HARA, KOICHIRO	
	<b>Examiner</b>	<b>Art Unit</b>	
	Thinh H. Nguyen	2861	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-2,5-15,17-18,20-21,24,27,29,31,33-35 is/are rejected.
- 7) ☒ Claim(s) 4,19,22,23,25,26,28,30 and 32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____.  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____.   | 6) <input type="checkbox"/> Other: ____.                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 5-15, 17-18, 20-21, 24, 27, 29, 31, 33-35 are rejected under 35 U.S.C. § 102(b) as being anticipated by Stoffel et al. (U.S.5,880,758)

Re claims 1, 11, 14, 15 (regarding pulse signal/waveform; claims 15, 17), 18 (regarding high quality/draft mode), 20, 21, 23 (regarding volume change; print quality corresponding to print resolutions), 27, 29, 31, Stoffel discloses the instant claimed color inkjet printer (10) comprising:

- a first ink ejecting portion (18, black cartridge) operable to eject droplets of a black ink;
- a second ink ejecting portion (18, C,M,Y cartridges) operable to eject droplets of an ink of a color other than black;
- a pulse-waveform-data memory for storing pulse-waveform data (drop volume expressed in term of frequency or pulse-waveform is commonly known in the art; see pulse, line 17, col.4) indicative of a plurality of different waveforms corresponding to respective different total volume values (col.5, Table) of at least one droplet of each of the black ink and the ink of said color other than black;

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a first control portion (as described by microprocessor; col.4, line 16) operable to select, for said at least one droplet for forming each dot of said black ink on a recording medium, one of said plurality of different waveforms stored in said pulse-waveform data memory, and control said first ink ejecting portion to eject said at least one droplet, on the basis of the selected one of said plurality of different waveforms; and

a second control portion (as described by microprocessor; col.4, line 16) operable to select, for said at least one droplet for forming each dot of said color other than black on said recording medium, another of said plurality of different waveforms stored in said pulse-waveform-data memory, and control said second ink ejecting portion to eject said at least one droplet, on the basis of the selected another of said plurality of different waveforms, wherein a total volume of said at least one droplet of said black ink ejected by said first ejecting portion is larger than a total volume of said at least one droplet of the ink of said color other than black ejected by said second ink ejecting portion (col.6, lines 35-36);

said first and second control portions controlling said first and second ink ejecting portions to form an image on the recording medium, such that a relationship between said total volume of the at least one droplet of said black ink and said total volume of the at least one droplet of the ink of said color other than black in each first local area (characterized by image area) of said image in which the black ink dots are adjacent to the ink dots of said color other than black is different from that in each second local area (characterized by text area) of the image in which the black ink dots are not adjacent to the ink dots of said color other than black. (see col.5, line 42-62)

Re claims 2, 8, 9, 10, 12, 13 (claims 10, 12, 13, regarding third ink), 33-35 (claims 33-35, regarding color ink volume is kept smaller than that of black ink) the respective value for color inks (C, M, Y) are kept in the range 40 to 65pL when changing and smaller than that of black ink (90 to 130pL) throughout the entire operation.

***Allowable Subject Matter***

3. Claim 4, 19, 22-23, 25-26, 28, 30, 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Patent Application Information Retrieval (PAIR)***

4. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

***Response to Amendment***

Applicant's amendment filed have been fully considered. However, the indicated allowability of claims 1-2, 14-15 are withdrawn in view of the newly discovered reference to Stoffel et al. (U.S. 5,880,758) as noted in the above rejections.

**Contact Information**

5. Any inquiry concerning this communication should be directed to examiner Thinh Nguyen at telephone number (571) 272-2257. The examiner can generally be reached Mon-Wed, and Thurs from 6:30A – 3:00P. The official fax phone number for the organization is (571) 273-8300. The examiner supervisor, Vip Patel, can also be reached at (571) 272-2458.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 308-1782.



Thinh Nguyen  
July 18, 2006

**Thinh Nguyen**  
**Primary Examiner**  
**Technology Center 2800**